

Newcomb's Eclipse No.	Date.	Hansen's ∇	ΔV		Radius of Shadow Σ	Magnitude of Eclipse.		
			N.	O.		N.	O.	O.
11	-200	+35'2	-0'1	-3'4	39'5	0.67	0.78	partial
12	-199	+13'4	+0'1	+3'4	42'5	1.41	1.30	total
13	-199	-6'6	-0'1	-3'4	42'6	1.62	1.51	total
14	-173	-40'9	-0'1	-3'3	45'4	0.64	0.53	7 digits = 0.58
15	-140	+52'9	+0'1	+3'2	45'2	0.27	0.17	3 digits = 0.25
16	+125	+55'7	-0'1	-2'4	42'6	0.09	0.17	0.17
17	+133	-24'1	+0'1	+2'4	39'1	1.00	1.08	total
18*	+134	-28'7	-0'1	-2'4	39'5	0.85	0.77	[0.33]
19	+136	-48'5	+0'1	+2'4	44'6	0.38	0.46	0.50

It will be evident from the explanation, but it should be stated in close proximity to the table, that the columns headed "N." are not copied from Professor Newcomb, but are computations of my own to correspond with "Newcomb's corrections."

This table on the whole exhibits some slight evidence in favour of my correction to the distance between the Sun and the Moon's node. In fact, the error only amounts to 0.1 in the case of the first two eclipses. It will be noticed that in the first three eclipses we find the phrase: "is recorded as having occurred." In the other eclipses we find the more positive assertion: "occurred."

Observation of the Partial Eclipse of the Sun, 1905 August 29-30, at the Radcliffe Observatory, Oxford.

(Communicated by Dr. Arthur A. Rambaut, F.R.S., Radcliffe Observer.)

The time of first contact was well observed by Mr. Wickham, with a telescope which is permanently attached to the mounting of the 18-inch and 24-inch telescopes. The object-glass of this instrument is of 7 inches aperture, and its focal length is nearly 10 feet; the eyepiece employed was an ordinary solar diagonal of power 125.

Clouds had for some time prevailed, but fortunately for a short interval before contact the obscuration diminished, until only a very thin haze remained; through this the surface markings of the Sun's disc were neatly and clearly seen, and the limb was steady and sharply defined.

The first trace of indentation by the advancing limb of the Moon was easily detected, and the time registered by means of

* In eclipse No. 18 the observed magnitude was perhaps 0.67 and an error of copying has occurred.

the electric chronograph. The instant thus recorded, when expressed in Greenwich mean time, was

$$23^{\text{h}}\ 47^{\text{m}}\ 3^{\text{s}}\cdot8$$

which is practically identical with the time (predicted to the decimal of a minute) in the *Nautical Almanac*, viz.

$$23^{\text{h}}\ 47^{\text{m}}\cdot1$$

By watching the rate of progress of the indentation for some seconds the observer estimated that external geometrical contact took place 2 seconds earlier than the time registered. The Moon's motion was rapid.

Broken clouds soon supervened, and ultimately the sky became thickly overcast, the final contact being invisible.

Radcliffe Observatory, Oxford:
1905 November 6.

Observations of Comet d 1902 from Photographs taken with the 30-inch Reflector of the Thompson Equatorial at the Royal Observatory, Greenwich.

(Communicated by the Astronomer Royal.)

The following positions of Comet *d* 1902 are obtained from photographs with the 30-inch reflector. As a rule there were two images on each plate, and the exposures varied from 10^m to 20^m. The plates were measured in the Astrographic Micrometer. Four reference stars were taken in each case, situated as symmetrically as possible about the comet. The positions of the reference stars were derived from the Catalogues of the *Astronomische Gesellschaft*.

Date and G.M.T.				Apparent R.A.			Apparent Dec.			Log. Δ.	Corr. for Parallax.	
											R.A.	Dec.
1902.	h	m	s	h	m	s	°	′	″		s	″
Dec. 29	12	2	54	7	4	32·07	3	16	43·6	0·2917	−0·03	+3·3
30	12	36	32	7	3	49·67	3	32	55·3	0·2903	+·01	+3·3
31	11	59	17	7	3	8·62	3	48	37·6	0·2889	−·02	+3·3
1903.												
Jan. 2	11	33	4	7	1	43·99	4	21	19·9	0·2866	−·04	+3·3
3	10	39	33	7	1	2·45	4	37	34·5	0·2855	−·07	+3·3
7	10	31	23	6	58	7·37	5	47	15·5	0·2818	−·07	+3·3
7	10	57	55	6	58	6·52	5	47	35·8	0·2818	−·05	+3·3
8	11	34	30	6	57	21·20	6	6	3·4	0·2809	−·01	+3·3
15	11	29	1	6	52	14·79	8	17	3·9	0·2779	+·01	+3·2